DOCUMENT RESUME

ED 412 215 SP 037 598

AUTHOR Powell, Barbara M.

TITLE Achievement Goals and Student Motivation in the Middle School Years: Teachers' Use of Motivational Strategies with High and Low Performing Students.

PUB DATE 1997-00-00

NOTE 9p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, IL, March 1997).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Academic Achievement; *Educational Strategies; High Achievement; Intermediate Grades; Junior High Schools; Low Achievement; Mastery Learning; Middle Schools; *Motivation Techniques; Self Evaluation (Individuals); Student Attitudes; Student Evaluation of Teacher Performance; *Student Motivation; Teacher Attitudes; Teacher Evaluation; Teacher Expectations of Students

IDENTIFIERS *Middle School Students; *Middle School Teachers

ABSTRACT

This study compared the perceptions of teachers and their students about the frequency with which the teachers used motivational strategies that supported mastery goals with both high- and low-performing students. A sample of 47 middle school teachers and their students (314 high-performing and 243 low-performing) completed teacher and student versions of the Motivational Strategy Use Questionnaire. The 27-item questionnaire measured the extent to which teachers' reports of the frequency with which they used adaptive motivational strategies agreed with the perceptions of their high- and low-performing students within the same classroom. Data analysis indicated that teachers reported using adaptive motivational strategies more frequently with high-performing students. Teachers and students differed significantly in their perceptions of the frequency with which teachers used adaptive motivational strategies. Both high- and low-achieving students reported low frequencies of teachers using motivational strategies that would support a mastery goal. Younger students tended to see their classrooms as more mastery focused than did older students. (Contains 22 references). (Author/SM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 412 215

Achievement Goals and Student Motivation in the Middle School Years: Teachers' Use of Motivational Strategies with High and Low Performing Students

Barbara M. Powell

Eastern Illinois University

Paper presented at the 1997 annual meeting of the American Educational Research Association, Chicago, March.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

B M. Powell

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

SP037598

BEST COPY AVAILABLE

Abstract

This study was designed to compare the perceptions of a sample of teachers and their students about the frequency with which those teachers used motivational strategies which support a mastery goal with both their high and low performing students. A sample of 47 middle school teachers and their students (grades 6-8) completed the Motivational Strategy Use Questionnaire, a 27-item measure designed to show the extent to which teachers' reports of the frequency with which they used adaptive motivational strategies agreed with the perceptions of their high and low performing students within the same classroom.

The first hypothesis of the study, that teachers would report using adaptive motivational strategies more frequently with high performing students than with low performers was supported. The second hypothesis, that high and low performing students would differ in their perceptions of the frequency with which their teacher used these strategies was not supported. Both high and low performing students rated their teachers as low mastery. However, ANOVA results showed both gender and grade level differences in students' perceptions of the motivational structure of the classroom. The third hypothesis, that teachers' reports would correspond more closely to the reports of their high performing students than their low performers was not supported. Teachers rated themselves significantly higher in their use of motivational strategies which support a mastery goal than either group of students did.

Findings suggest that teachers need to be made aware of the possible differences between their perceptions and those of their students. Further research into grade level and gender differences may also help explain how these variables operate in influencing students' perceptions.

Theoretical Framework

Achievement goal theory has made a major contribution to the area of learning motivation because it has provided strong evidence that students who pursue a mastery goal in learning contexts will experience adaptive motivational outcomes (Ames, 1992, 1994; Ames & Archer, 1988; Blumenfeld, 1992; Meece, Blumenfeld & Hoyle, 1988; Wentzel, 1989). A mastery goal is characterized by a focus on increasing competence and building skills by mastering the tasks one encounters in achievement contexts. Students who adopt a mastery goal tend to persist on a task even when mastery does not come easily (Dweck, 1986; Nicholls, 1984a, 1984b); to be intrinsically motivated (Ames & Archer, 1988; Powell, 1990); to view effort as a means of achieving success (Covington & Omelich, 1984); to use effective learning strategies (Meece, Blumenfeld & Hoyle, 1988; Nolen, 1988); and to report a greater liking of school and school-related activities than students who do not adopt a mastery goal (Ames & Archer, 1988; Powell, 1990).

Research has also demonstrated that the structure of the classroom can influence students' goal orientation (Ames & Archer, 1988; Blumenfeld & Meece, 1987; Nolen & Haladyna, 1990). There is also evidence that teachers, by means of the achievement goals they emphasize, create a classroom motivational structure which can influence the achievement goals which their students adopt (Nolen & Haladyna, 1990). Research in the area of pedagogy has long demonstrated that even within the same classroom, high and low performing students may have different experiences. For example, teachers tend to use more effective *instructional* techniques with high performing students than with low performers (Brophy, 1988; 1991; Brousseau, Book & Byers, 1988; Prawat, 1992). An important question that remains to be answered is whether teachers also use different *motivational* strategies with the two groups of students. Ames (1992) provided the first empirical evidence that such differences do exist. She collected data from three groups of students in the same classrooms: at-risk, learning disabled, and randomly selected students who were not at-risk and found that the groups had different perceptions about the motivational climate of their classroom. This variance in perceptions might have occurred because even if teachers believed that a mastery goal is important, they may have found it difficult or impossible to implement with all students. In fact, teachers may be more likely to use mastery goal focused strategies with their high performing students because these strategies, designed as they are to promote self-regulated learning, are easier to implement with students whose behaviors already indicate that they have an interest in learning. However, since low performing students in any classroom are likely to be poorly motivated because of their repeated experiences of failure, it is especially important that teachers structure the classroom environment so that those low performers are encouraged to adopt a mastery goal. With that idea in mind, the present study was designed to investigate three questions: 1. Do teachers report using motivational strategies which support a mastery goal equally with high and low performing students? 2. Do high and low performing students differ in their perceptions of the frequency with which their teacher uses motivational strategies which support a mastery goal? 3. Do

teachers and their students share similar perceptions about the frequency of teacher use of motivational strategies which support a mastery goal?

Although motivation to learn is important for students of any age, recent findings suggest that it is an especially important concern during the middle school years, which encompass grades 6-8 (Anderman & Maehr, 1994). Both developmental and situational factors unique to these years are important in the refining of students' academic self-concept and their attitudes toward themselves as learners . Thus, the present study focused on students in those grades.

Method

Subjects. The sample included 45 middle school and junior high school teachers. Each teacher selected one of their classes to participate in the study. Teachers provided the investigator with the names of at least six high performing and six low performing students in that class. A total of 314 high performing students and 243 low performing students participated in the study. Most of the students in the sample were European American (73%) or African American (17%).

Procedure. Teachers and students completed the Motivational Strategy Use Questionnaire.

Motivational Strategy Use Questionnaire--Teacher Version. This scale asked teachers to indicate the frequency with which they used motivational strategies with their high and low performing students. Items on the questionnaire focused on two classroom areas which have been found in previous research to be associated with adaptive student motivation: the Task area, which includes both the structure of tasks and the learning strategies teachers encourage students to use when doing their work; and the Autonomy area, which involves opportunities for choice and leadership in the classroom. This 27-item measure was adapted from the Classroom Goal Orientation Questionnaire (Ames & Archer, 1988) and an unpublished questionnaire by Ames (1989). It also included items from scales developed by Nolen and Haladyna (1990), Pintrich and DeGroot (1990), Maehr and Midgley (1990) and Anderman and Young (1993).

Using a 5-point Likert scale, teachers indicated whether they used each strategy "100% of the time, 75% of the time, 50% of the time, 25% of the time, or Never." Teachers completed the questionnaire twice, once for high performing and once for low performing students. Items began, "When working with a typical high-performing (low-performing) student in your class, how often do you do the following?" Examples of scale items were: Let them work on a variety of different projects. . .Let them help decide how to do things. . .Encourage them to initiate projects on their own. Cronbach alpha reliabilities were .90 for the high performers' scale and .88 for the low performers' scale. Because it was of interest to determine teachers' perceptions about their use of motivational strategies in the Task and Autonomy areas, separate subscales were created. Cronbach alpha reliabilities for the 14-item Task subscale were .88 for high performers and .86 for low performers; for the 13-item Autonomy subscale they were .79 for high performers and .77 for low performers.

Motivational Strategy Use Questionnaire--Student Version. Items on this questionnaire were the same as those on the teacher version, except that the wording was changed to reflect the students' perspectives. The Likert scale format was the same as that used for the teachers' scale.. Cronbach alpha reliabilities for the overall scale were .89, for the

Task subscale, .86, and for the Autonomy subscale, .73.

Teachers completed the questionnaires and returned them to the investigator. The student questionnaire was administered by the investigator and a research assistant to the classroom as a whole, but only responses of the teacher nominated high and low performing students were analyzed. Students received an answer sheet, and the investigator read each item to the students and they filled in their responses on the sheet. Teachers were not in the classroom when students completed the questionnaires.

RESULTS

Teachers' Reports of their Use of Motivational Strategies. Mean scores were calculated separately for each teacher based on responses to the questionnaire. Teachers were considered to be High Mastery if they reported using strategies which support a mastery goal over 50% of the time (a mean score of 3.01 or higher) and Low Mastery if they reported using those strategies less than 50% of the time (a mean score of 2.99 or lower). The majority of teachers rated themselves High Mastery with both high (82%) and low (80%) performing students (see Table 1). However, *t*-tests for paired samples revealed significant differences in teacher reports of the frequency with which they used motivational strategies with high and low performing students ($t = 2.52$, $p < .05$, see Table 2). If teachers rated themselves as High Mastery with their high performing students, they tended to rate themselves as High Mastery with their low performers also, but their use of mastery focused strategies was significantly less frequent with low performing students. The same pattern existed for teachers who rated themselves Low Mastery. Even if they saw themselves using mastery focused strategies less than 50% of the time with both high and low performing students, they still reported using those strategies less frequently with low performers than with high performers. A similar pattern existed for the Task and Autonomy subscales. One-way ANOVAs showed no significant effects for gender, grade level, or years of teaching.

Students' Reports of Teachers' Use of Motivational Strategies. Mean scores were calculated for students based on their responses to items on the questionnaire. Eighty per cent of the high performers and 78% of the low performers rated their teacher as Low Mastery on the overall scale (Table 3). Similar patterns existed for the Task and Autonomy subscales. Ratings by students on the Autonomy subscale were especially low, with 94% of the high performing students and 91% of the low performing students reporting that their teachers used strategies in the Autonomy area less than 50% of the time. Then Pearson product-moment correlations were calculated to determine the strength of the relationship between the responses of high performing students and low performing students. No significant difference was found. Tests for significant differences between the mean scores of the high and low performing students also showed no difference between the two groups on the overall scale or the Autonomy subscale. However, on the Task subscale, high performers rated their teacher as higher in frequency of use of mastery goal focused strategies than low performers did ($t = 2.24$, $p < .05$).

To test for gender and grade level effects for students, one-way ANOVAs were

conducted. Main effects for grade were found (see Table 4). Tukey HSD tests revealed that on the overall scale, sixth graders reported that their teachers used motivational strategies which support a mastery goal significantly more frequently than eighth graders did. [Insert results for gender--Table 5]

Comparison of Teacher and Student Responses to Questionnaire Items. Using paired samples t-tests, analyses were run comparing responses of teachers and their high performing students and teachers and their low performing students. On the overall scale, there were significant differences between responses of teachers and their high performing students (for teachers, $x = 3.49$, for high performing students, $x = 3.08$, $t = 5.67$, $p < .0001$) and for teachers and their low performing students (for teachers, $x = 3.40$, for low performing students, $x = 3.02$, $t = 5.91$, $p < .0001$). Similar results were found for the Task and Autonomy subscales. Teachers consistently perceived themselves using strategies which support a mastery goal more frequently than either their high or low performers did (Table 6).

IMPORTANCE OF THE STUDY

Two findings of the study are especially relevant. First, teachers and students differed significantly in their perceptions of the frequency with which the teacher used adaptive motivational strategies. This lack of congruence between teacher and student perceptions is of special concern, because even if the teachers were attempting to use mastery goal focused strategies, the students did not perceive that they were. Second, younger students tended to see their classrooms as more mastery focused than older students did. This finding might be explained by the fact that school tends to become more competitive as students move through the elementary grades. More research is needed to answer the questions raised by this study.

REFERENCES

Ames, C. (1989). [Scale to measure of teachers' motivational goals]. Unpublished raw data.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. Journal of Educational Psychology, 84, 261-271.

Ames, C. (1994). Achievement goals and the classroom motivational climate. In J. Meece & D. Schunk (Eds.), Students' perceptions in the classroom: Causes and consequences. Greenwich, CT: JAI Press.

Ames, C. & Archer, J. (1988). Achievement goals in the classroom: Student learning strategies and motivation processes. Journal of Educational Psychology, 80, 260-267.

Anderman, E. M. & Maehr, M. L. (1994). Motivation and schooling in the middle grades. Review of Educational Research, 64, 287-309.

Anderman, E. M. & Young, A. J. (1993, April). A multilevel model of adolescents' motivation and strategy use in academic domains. Paper presented at the annual meeting of the American Educational Research Association, Atlanta.

Blumenfeld, P. C. (1992). Classroom learning and motivation: Clarifying and expanding goal theory. Journal of Educational Psychology, 84, 272-281.

Blumenfeld, P. & Meece, J. (1987). Task factors, teacher behavior, and students' involvement and use of learning strategies in science. The Elementary School Journal, 88, 235-250.

Brophy, J. (1988). Research on teacher effects: Uses and abuses. The Elementary School Journal, 89, 3-21.

Brophy, J. (1991). Advances in research on teaching (Vol. 2). Greenwich, CT: JAI Press.

Brousseau, B. A., Book, C. & Byers, J. L. (1988). Teacher beliefs and the culture of teaching. Journal of Teacher Education, 39, 33-39.

Covington, M. V. & Omelich, C. L. (1984). Task-oriented versus competitive learning structures: Motivational and performance consequences. Journal of Educational Psychology, 76, 1038-1050.

Dweck, C. (1986). Motivational processes affecting learning. American Psychologist, 41, 1040-1047.

Maehr, M. & Midgley, C. (1990). Home and school cooperation in social and motivational development: Replication. Department of Education, Office of Special Education Research.

Meece, J. L., Blumenfeld, P. C. & Hoyle, R. H. (1988). Students' goal orientations and cognitive engagement in classroom activities. Journal of Educational Psychology, 80, 514-523.

Nicholls, J. G. (1984a). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. Psychological Review, 91, 328-346.

Nicholls, J. G. (1984b). Conceptions of ability and achievement motivation. In R. Ames & C. Ames (Eds.), Research on motivation in education (Vol 1, pp. 39-73). San Diego, CA: Academic Press.

Nolen, S. B. & Haladyna, T. M. (1990). Personal and environmental beliefs about effective study strategies. Contemporary Educational Psychology, 15, 116-130.
Paris, S. G. & Newman, R. S. Developmental aspects of self-regulated learning. Educational Psychologist, 25, 87-102.

Pintrich, P. R. & deGroot, E. V. (1990) Motivational and self-regulated learning components of classroom academic performance. Journal of Educational Psychology, 82, 33-40.

Powell, B. (1990, April). Achievement goals in the classroom. Paper presented at the annual meeting of the American Educational Research Association, Boston.

Prawat, R. S. (1992). Teachers' beliefs about teaching and learning: A constructivist perspective. American Journal of Education, 100, 354-395.

Wentzel, K. R. (1989). Adolescent classroom goals, standards for performance, and academic achievement: An interactionist perspective. Journal of Educational Psychology, 81, 131-142.